

## STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0086231 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I.           **THE APPLICANT IS:** Lafayette Consolidated Government  
Lafayette Municipal Composting Facility  
P. O. Box 4017-C  
Lafayette, LA 70502
- II.           **PREPARED BY:** Paula M. Roberts  
**DATE PREPARED:** February 9, 2006
- III.           **PERMIT ACTION:** renewal of LPDES permit LA0086231/AI 42182  
  
LPDES application received: April 5, 2002

IV.           **FACILITY INFORMATION:**

- A.           The application is for the discharge of treated contact and non contact stormwater runoff from composting operations areas of the site that consist of receiving, handling, storage and processing of yard waste.
- B.           The facility is located at 400 N. Dugas Road; Lafayette Parish, Louisiana.
- C.           The treatment process consists of a two cell oxidation pond.
- D.           Outfall 002

Discharge Location:      Latitude 30° 17 ' 14" North  
   Longitude 92°03' 32" West

Description:              treated contact and non contact stormwater runoff

Design Flow:              122 MGD (24-hr, 25-year storm event)

The application list two outfalls for this facility, however, Outfall 001 has been closed and is no longer in use.

V.           **RECEIVING WATERS:**

The discharge is from an effluent pipe into Coulee Mine, thence into Vermilion Bayou in segment 060801 of the Vermilion-Teche River Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 060801 of the Vermilion-Teche River Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment 060801	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Not	Not	Not	Not	N/A	N/A	N/A	Full

<sup>1/</sup>The designated uses and degree of support for Segment 060801 of the Vermilion-Teche River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) the 2002 and the 2004 Water Quality Management Plan, Volume 5, Part B, Water Quality Inventory respectively.

Subsegment 060801, Vermilion River – Headwaters at Bayou Fusilier – Bourbeaux junction to New Flanders (Ambassador Caffery) Bridge, La Hwy. 3073, is listed on LDEQs 2004 Integrated Report with Final EPA Additions as having to address the following parameters: Carbofuran, Nitrate/Nitrite, Dissolved Oxygen, Sedimentation/Siltation, Total Fecal coliform, Total suspended solids, and Turbidity. TMDLs for these parameters have been developed and finalized.

The March 21, 2002 TMDL for the pesticide Carbofuran was developed for the Mermentau and Vermilion-Teche River Basin. The TMDL is based on EPA developed numeric targets appropriate for freshwater (0.13 ug/l) and marine (0.23 ug/l) environments. It is assumed that the listed subsegments have no assimilative capacity for carbofuran loading at concentrations above the numeric targets for fresh or marine waters. The wasteload (WLA) and the load allocation (LA) cumulatively for the Mermentau and Vermilion-Teche River Basins should not cause or contribute to exceedances for these numeric targets. The TMDL mentions only a single point source discharger which load limits were established and placed in the permit for that facility. For this facility, the permittee tested the effluent for pesticides and there were no pesticides detected in the effluent, therefore, no permit loading will be proposed in the permit.

The Vermilion River TMDL for Fecal Coliform finalized on April 5, 2001, states that the Louisiana Water Quality Regulations require point source discharges of treated sanitary wastewater to maintain a fecal coliform count of 200 cfu/100 ml in their effluent, i.e., they must meet the standard at end-of-pipe. The sanitary discharge from this facility is treated by a septic system with field line. There is no sanitary discharge from any of the outfalls on site, therefore, fecal coliform limits are not imposed in this permit.

The May 2, 2002 TMDL for TSS, Turbidity, and Siltation for the 15 subsegments in the Vermilion River Basin states that point sources do not represent a significant source of TSS as defined in this TMDL. Point sources discharge primarily organic TSS, which does not contribute to habitat impairment resulting from sedimentation. Because the point sources are minor contributors and discharges of organic suspended solids from point sources are already addressed by LDEQ through their permitting of point sources to maintain water quality standards for DO, the wasteload allocations for point source contributions were set to zero. This TMDL only addresses the landform contribution of TSS/sediment and does not address the insignificant point source contributions. In the water quality monitoring data collected by LDEQ, it shows an overall trend toward improving water quality in spite of the occasional violation of the dissolved oxygen criteria. However, TSS limits are included in the permit consistent with other permit(s) and/or similar discharges from oxidation ponds.

The Vermilion River Dissolved Oxygen and Nitrogen TMDL was finalized on April 5, 2001. In the 1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Dissolved Oxygen, it states that a Total Maximum Daily Load for Dissolved Oxygen for subsegments 060801 and 0608021 was prepared by LDEQ and approved by EPA in 1987. The TMDL quantified both point sources and nonpoint sources of pollution, established waste load allocations for point sources, established the load allocation for nonpoint sources at existing quantities, addressed seasonal variations and included a margin of safety.

The 1987 Vermilion River model continues to adequately simulate conditions in the watershed. The TMDL which resulted from that model has been the basis for issuing NPDES permits in the watershed since the 1987 approval. Facilities with discharge flow rates of greater than 25,000 gpd have been permitted at 10 mg/l CBOD5/5 mg/l NH3N/5 mg/l DO for April - November and at 20 mg/l CBOD5/5 mg/l NH3N/5 mg/l DO for December-March. Facilities discharging 25, 000 gpd or less have been permitted at secondary limits year round. Based upon this information, the NPDES permit for the individual point sources in the watershed should continue to be issued on the basis of flow rates.

It is the Best Professional Judgment of the permit writer that this discharge will not have any significant impact on the receiving stream that will cause further impairment. This is based upon the fact that the discharge is intermittent and that the permittee discharged only six (6) times in a two year period. However, TSS is addressed in this permit and due the nature of the operations at this site, monitor and report requirements for Total Phosphorus, and Nitrate-nitrite are also addressed in this permit.

**VI. ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 060801 of the Vermilion-Teche River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 21, 2005 from Watson (FWS) to Gautreaux(LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

**VII. HISTORIC SITES:**

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit to the LDEQ contact person, listed below, and may request a public hearing to clarify issues involved in the permit decision. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation  
Department of Environmental Quality Public Notice Mailing List

For additional information, contact:

Ms. Paula M. Roberts  
Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

**IX.**

**PROPOSED PERMIT LIMITS:**

**Final Effluent Limits:**

**OUTFALL 002, contact and non-contact stormwater runoff**

Final effluent limits shall become effective on the effective date of the permit and expire on the expiration date of the permit

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Max	Basis
TSS	----	---	135 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgment for the type of treatment technology utilized at this facility.
Oil & Grease	----	----	15 mg/l	BPJ from previously issued water discharge permits for similar facilities/effluents
TOC	----	----	50 mg/l	BPJ from previously issued water discharge permits for similar facilities/effluents
Total Phosphorus	----	Report	Report	Best Professional Judgment due to the nature of the discharge
Nitrate-Nitrite	----	Report	Report	Best Professional Judgment due to the nature of the discharge

Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitation are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B. references LAC 33:IX.711 which expresses TSS in terms of concentration.

### Other Effluent Limitations

#### 1) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

#### 2) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

#### 3) Pesticides

The permittee submitted the results of the analysis for pesticides and PCBs as requested by the Department on May 11, 2005. The results were evaluated and non detect was reported for the pollutants listed below. Based upon the results of this analysis, there is no indication that pesticides and PCBs are found in the effluent, therefore, monitoring and report requirements for these pollutants will not be included in this permit. Please be aware should the type of waste accepted change, monitoring for pesticides may be included in the permit.

##### Pesticides (Storet Codes)

aldrin (39330)  
chlordan (51032)  
DDD-4,4 (39360)  
DDE-4,4 (39365)  
DDT-4,4 (39370)  
endrin aldehyde (34366)  
heptachlor (39410)  
heptachlor epoxide (39420)  
hexachlorocyclohexane-alpha (39336)  
hexachlorocyclohexane-beta (051007)  
hexachlorocyclohexane-delta (34198)  
hexachlorocyclohexane-gamma (lindane)(39344)  
dieldrin (39380)

##### Pesticides (Storet Codes)

endosulfan I (79617)  
endosulfan II (79618)  
endosulfan sulfate (34351)  
endrin (39390)  
PCB-1016 (34671)  
PCB-1221 (39488)  
PCB-1232 (39492)  
PCB-1242 (39496)  
PCB-1248 (39500)  
PCB-1254 (39504)  
PCB-1260 (39508)  
toxaphene (39400)

### X.

#### PREVIOUS PERMITS:

LPDES Permit No. LA0086231: Issued: November 5, 1997  
Effective: November 5, 1997  
Expired: November 4, 2002

<u>Effluent Characteristic</u>	<u>lbs./day</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
		Daily <u>Avg.</u>	Daily <u>Max</u>	Measurement <u>Frequency*1</u>	Sample <u>Type</u>
Flow	---	Report	Report	1/ discharge	Estimate
BOD <sub>5</sub>	---	---	45 mg/l	1/discharge	Grab
TSS	---	---	50 mg/l	1/discharge	Grab
TOC	---	---	50 mg/l	1/discharge	Grab
Oil & Grease	---	---	15 mg/l	1/discharge	Grab
pH	---	6.0(min)	9.0(max)	1/discharge	Grab

\*1 When discharging

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**

**A) Inspections**

A review of EDMS indicates the following inspections were performed during the period beginning November 2002 and ending January 2005 for this facility.

**Date – November 22, 2002**

**Inspector(s) – Douglas Hale, LDEQ/Acadiana Regional Office**

**Findings and/or Violations:**

A routine compliance evaluation inspection was performed and the following was noted.

1. The compost facility has two treatment ponds for stormwater runoff.
2. Levees were intact and no trees were growing.
3. No areas of concern were noted for receiving waters. Stormwater is batch discharged.
4. Discharge Monitoring Reports review revealed no areas of concern except for Total Organic Carbon exceedances of permit limits. Noncompliance reports are being submitted for the exceedances. Facility is currently trying to decide how to keep the Total Organic Carbon under permit limits.
5. Flow is estimated permit requirements.
6. A total of 11 Total Organic Carbon and 3 Total Suspended Solids daily maximum permit limits for TOC and TSS are both 50 mg/l.

**B) Compliance and/or Administrative Orders**

A review of EDMS and TEMPO has revealed that there are no active enforcement actions administered against this facility from the period beginning January 2002 through April 2005:

**LDEQ Issuance:**

Docket # - WE-L-03-0518

Issued – September 10, 2003

The letter informed the facility that on November 26, 2002, an inspection was conducted to determine compliance with the Louisiana Environmental Quality Act and supporting regulations. The inspection report, noted areas of concern was forwarded to the Enforcement Division. The letter also, informed the permittee that immediate steps needed to be taken to ensure compliance with all environmental regulations at their facility.

**EPA Issuance: None**

**C) DMR Review**

A review of the discharge monitoring reports for the period beginning April 2002 through April 2004 has revealed the following violations:

Outfall 002

Effluent Characteristic

# of Violations

BOD<sub>5</sub> Max

2

TOC Max

4

Oil & Grease

0

pH

0

A detailed report is attached.

**XII. ADDITIONAL INFORMATION:**

The Monitoring Requirements, Sample Types, and Frequency of Sampling for this facility is based upon the previous permit, Best Professional Judgment of the permit writer, and guidance documents utilized in the drafting of the permit.

**Outfall 002**

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	1/discharge	Estimate
Total Suspended Solids	1/discharge	Grab
TOC	1/discharge	Grab
Oil & Grease	1/discharge	Grab
pH	1/discharge	Grab
Nitrate-Nitrite	1/discharge	Grab
Total Phosphorus	1/discharge	Grab

**XIII. TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

**XIV. REFERENCES:**

Louisiana Water Quality Management Plan, Vol. 8, Appendix A "Areawide Effluent Limitations Policy", Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan, Vol. 5, Part B, "Water Quality Inventory", Louisiana Department of Environmental Quality, 2002 and 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 2005.

Louisiana Final 2002 Integrated Report of Section 303(d) List of Impaired Waterbodies, December 8, 2003.

Modified Court Ordered 303(d) List of Impaired Waterbodies for Louisiana , 1999.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 23 - "The LPDES Program", Louisiana Department of Environmental Quality, 2005.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

The Basic Principles of Composting, Louisiana State University Agricultural Center, Louisiana Cooperative Extension Service.

Chapter 6, The Composting Process: Environmental, Health, and Safety Concerns.

Test Methods for the Examination of Composting and Compost, United States Department of Agriculture, August 12, 2001.

Workshop Text: Compost Facility Operator Training, Unit XXIX.Nuisances, April 17, 2001.

Record of Communication from Roberts to Pope, dated January 25, 2006.

LPDES Permit Application to Discharge Wastewater, Lafayette Consolidated Government /Compost Facility, April 5, 2002.

Discharge Monitoring Report Review												
Lafayette Consolidated Government - Compost Facility/LA0086231/AI 42182)												
Permit Requirements 145 mg/l BOD, 50 mg/l TSS, 50 mg/l TOC, 15 mg/l O&G, 6-9 pH Freq-1/discharge												
Period: September 2004 - September 2002												
MONTHS/YEAR	Flow Avg.	Flow Max	BOD Max	TSS Max	TOC Max	O&G Max	pH Avg.	pH Max				
September-04			NO DISCHARGE			NO DISCHARGE						
August-04			NO DISCHARGE			NO DISCHARGE						
July-04			NO DISCHARGE			NO DISCHARGE						
June-04	No value	No value	225	25	275	ND	No value	7.15				
May-04	No value	No value	328	41	285	ND	No value	6.15				
April-04			NO DISCHARGE			NO DISCHARGE						
March-04			NO DISCHARGE			NO DISCHARGE						
February-04	No value	No value	<6		5	ND	No value	7.73				
January-04			NO DISCHARGE			NO DISCHARGE						
December-03			NO DISCHARGE			NO DISCHARGE						
November-03			NO DISCHARGE			NO DISCHARGE						
October-03			NO DISCHARGE			NO DISCHARGE						
September-03			NO DISCHARGE			NO DISCHARGE						
August-03			NO DISCHARGE			NO DISCHARGE						
July-03			NO DISCHARGE			NO DISCHARGE						
June-03	10.5	10.5	<12	16	67.1	ND	7.86	7.9				
May-03			NO DISCHARGE			NO DISCHARGE						
April-03			NO DISCHARGE			NO DISCHARGE						
March-03			NO DISCHARGE			NO DISCHARGE						
February-03	No value	10.5	19	29	7.3	ND	No value	6.63				
January-03			NO DISCHARGE			NO DISCHARGE						
December-02			NO DISCHARGE			NO DISCHARGE						
November-02		5.25	<24	12	86.8	ND	No value	7.7				
October-02			NO DISCHARGE			NO DISCHARGE						
September-02			NO DISCHARGE			NO DISCHARGE						
Average		8.75	190.6667	24.6	121.0333	0	7.86	7.21				
Minimum	10.5	5.25	19	12	5	0	7.86	6.15				
Maximum	10.5	10.5	328	41	285	0	7.86	7.9				
Total No. of Excursions			2	0	4	0	0	0				
FOOTNOTES:	Max - Daily Maximum	Avg - Monthly Average	No value -	No value was reported on DMRS								
1) The areas which have no values represent months which had no DMR present in folder.												
2) Shaded areas represent excursions of noncompliance with the permit limitations.												